

Figures 1A - 1B

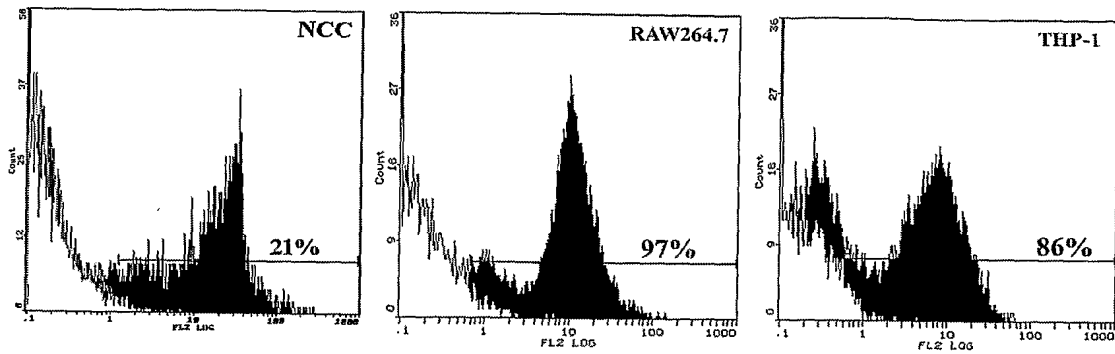
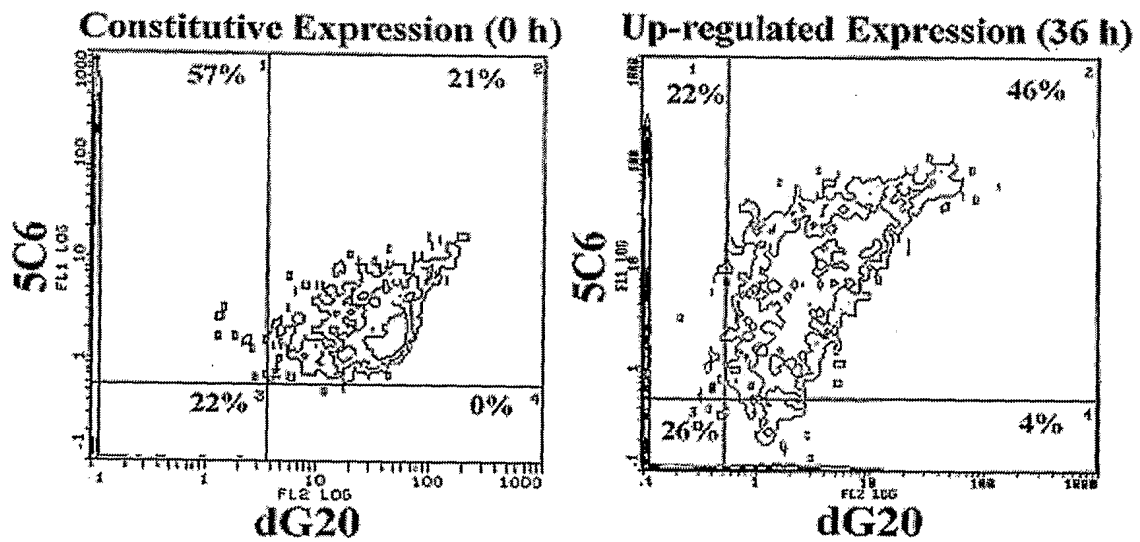
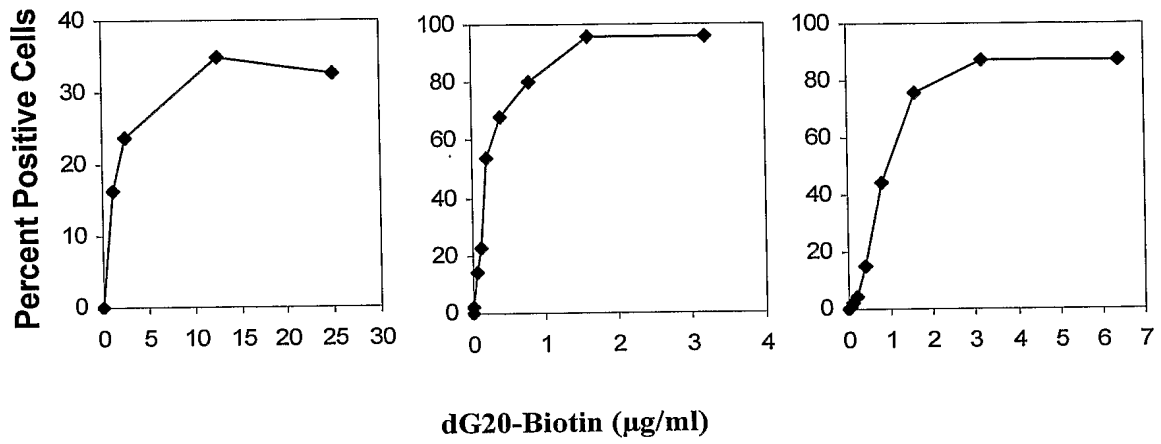
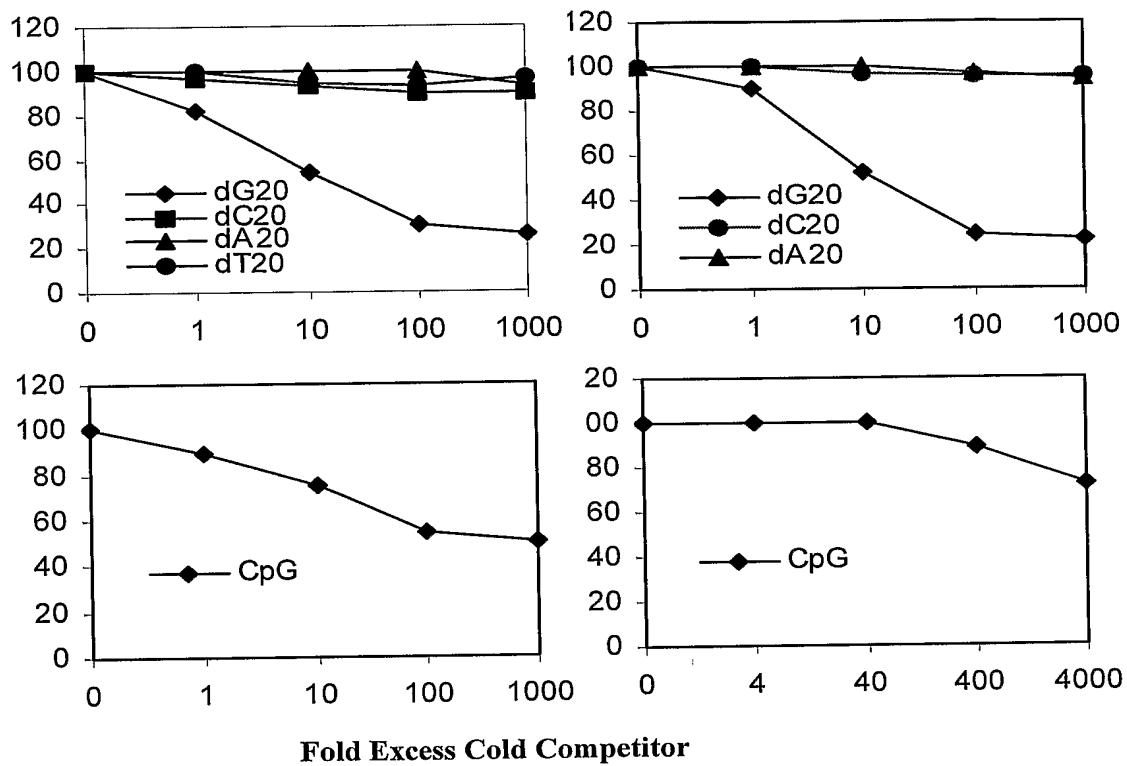
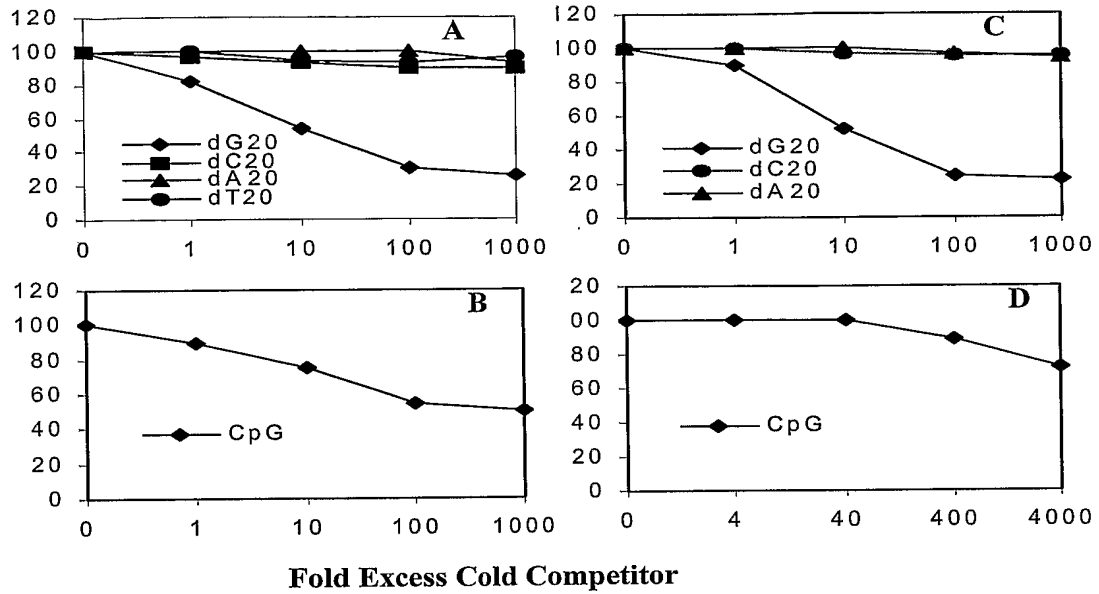
A**B**

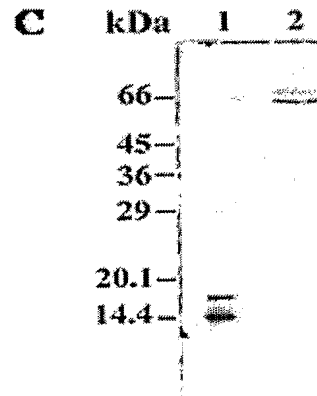
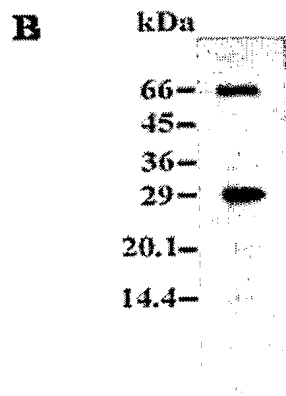
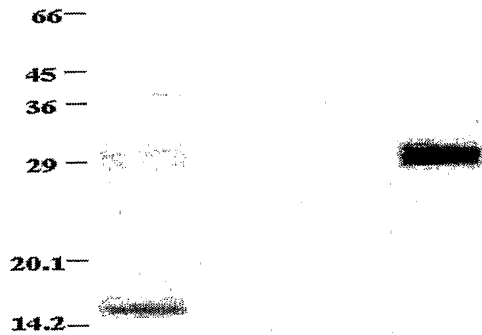
Figure 2

Figures 3A - 3D

Figures 4A - 4C



A 1 2 3 4 5 6



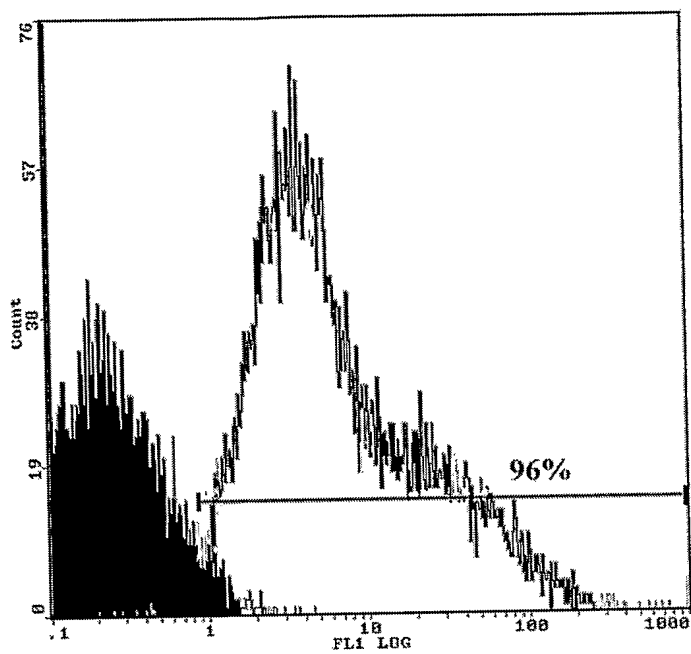
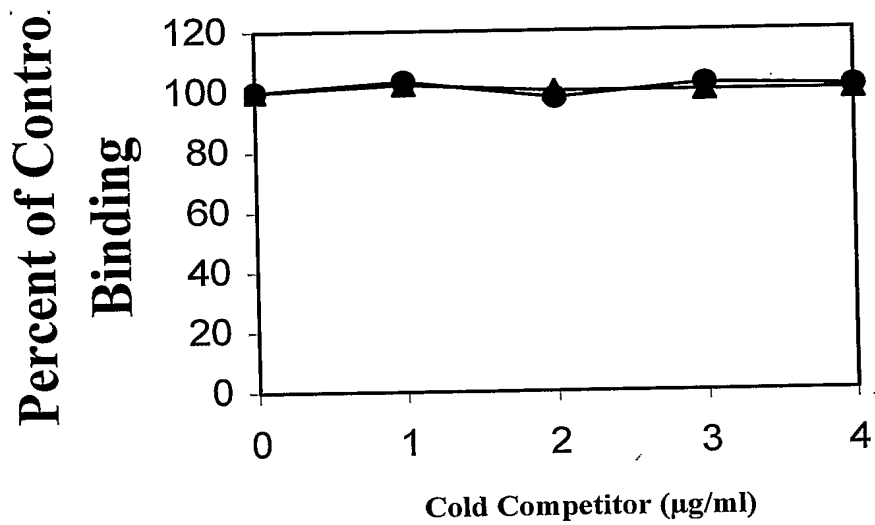
Figures 5A - 5B**A****B**

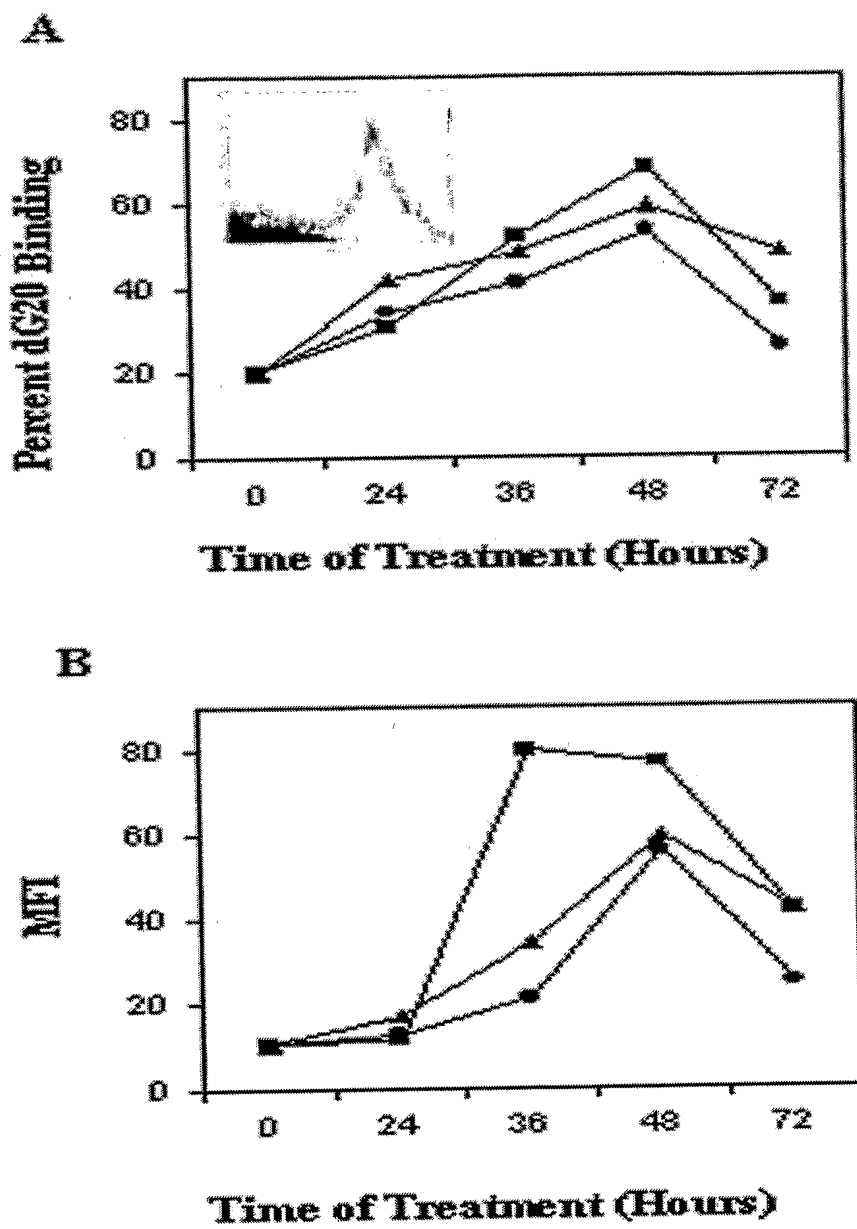
Figure 6

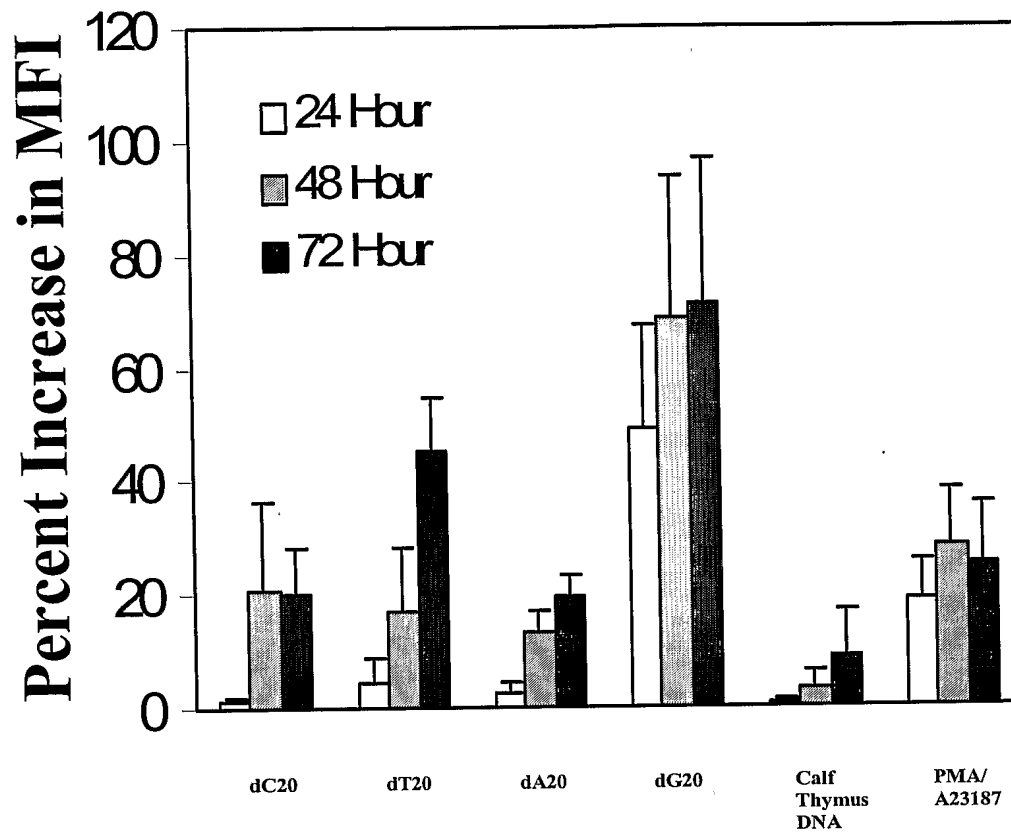
Figure 7

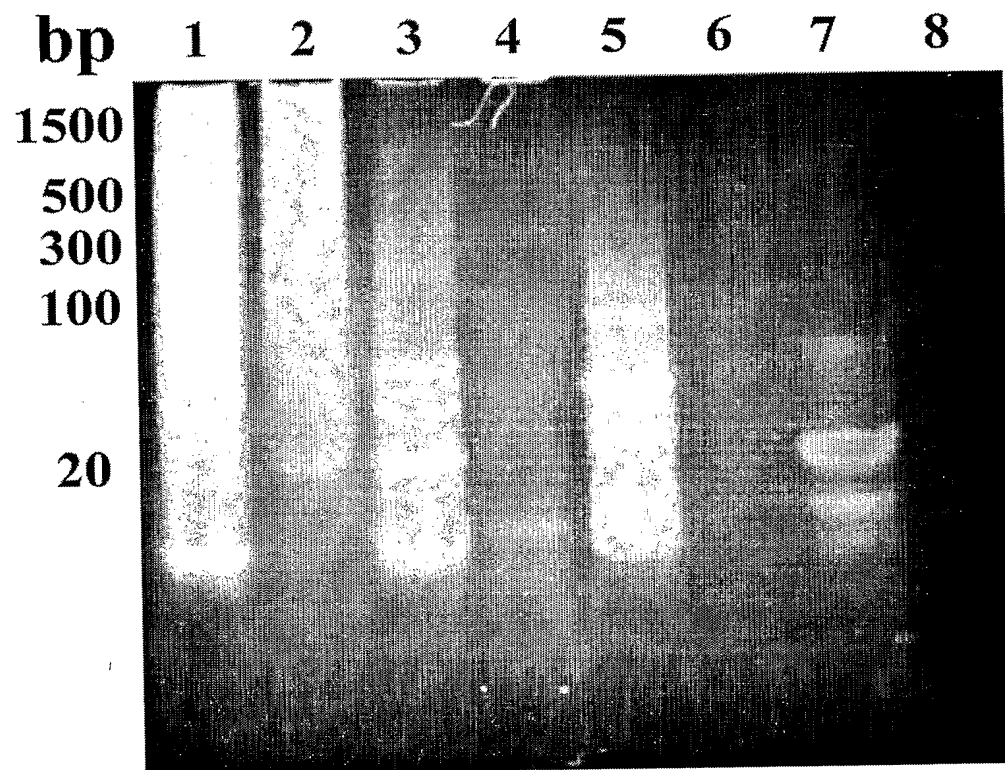
Figure 8

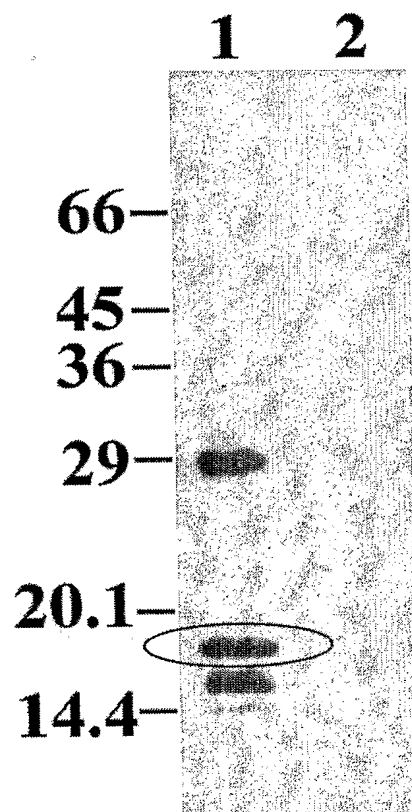
Figure 9

Figure 10

```

1   CGGCACGAGGGTTCAATAGCATCTCAAGGCGCTTCAGAACTTAAAGTTGA
    M S A Q A E E T A P E A A A P V      16
51  ACCATGCTCTGCTCAGGCTGAGGAACTGCACCAGAAGCAGCAGCACCAGT
    Q P S Q P A A K K K G P A S K A      32
101 ACAACCATCACAAACCAGCGGCCAAAAGAAGGGACCCGCCAGTAAAGCAA
    K P A S A E K K N K K K K G K G P      49
151 AGCCTGCCTCTGCAGAAAAAAGAACAAGAAAGGGAAAGGGGCC
    G K Y S Q L V I N A I Q T L G E R      66
201 GGAAAGTACAGCCAGCTGGTGATCAATGCTATCCAAACGCTGGGAGAGAG
    N G S S L F K I Y N E A K K V N      82
251 AAACGGCTCGTCTCTTTTAAAGATCTACAACGAGGCGAAGAAAGTGAAC
    W F D Q Q H G R V Y L R Y S I R A      99
301 GGTGTGACCAGCAGCACGGGCGCGTGTACCTCCGCTACTCCATCCGCGCG
    L L Q N D T L V Q V K G L G A N G      116
351 CTGCTGCAGAACGACACGCTCGTGAGGTGAAGGGTCTGGGCGCCAACGG
    S F K L N K K K F I P R T K K S      132
401 CTCCTTCAAGCTCAACAAAAAGAAGTTCATCCCCAGAACCAAGAAGAGCT
    S V K P R K T A K P T K K P A K K      149
451 CTGTAAAGCCGAGAAAGACTGCGAAACCGACCAAAAGCCAGCCAAAAAA
    A A K K K K R V S G V K K A T P P      166
501 GCAGCGAAGAAGAAGAAAAGGGTCAGCGGCGTGAAGAAGGCGACTCCCC
    P E K T S K P K K A D K S P A V      182
551 CCCAGAGAAAACCTCCAAACCAAGAAAGCGGATAAAAGTCCAGCCGTCT
    S A K K A S K P K K A K Q T K K T      199
601 CTGCCAAGAAGGCGAGCAAGCCCAAGAAAGCTAAACAGACAAAAAAGACT
    A K K T *                               203
651 GCTAAGAAGACTTAAAACGTTTATATTCTGCATGCTTTGTGCATTAAGCA
701 TTGCACTGCGGGTAAACTGCACGCTTTCTGATCGCAGTTCATTAAGTAGG
751 ATATGCACAGTGTTTAACCAAGTGCAAGTCACTCTGGTCTCAATGTTT
801 TACTGATGTAACCACATGTAAATAACTGTACAAAGAAGGAAACAATCACT
851 TTTGTAACGTCTGCTTTGTTATTATTCTTTTCTACTAGTTAGCTAAAAT
901 AACTGCTTATGGCTTCTTTTAAATAATGATAAAAGAAAAAAAAAAAA
951 AAAAAA

```

Figure 11

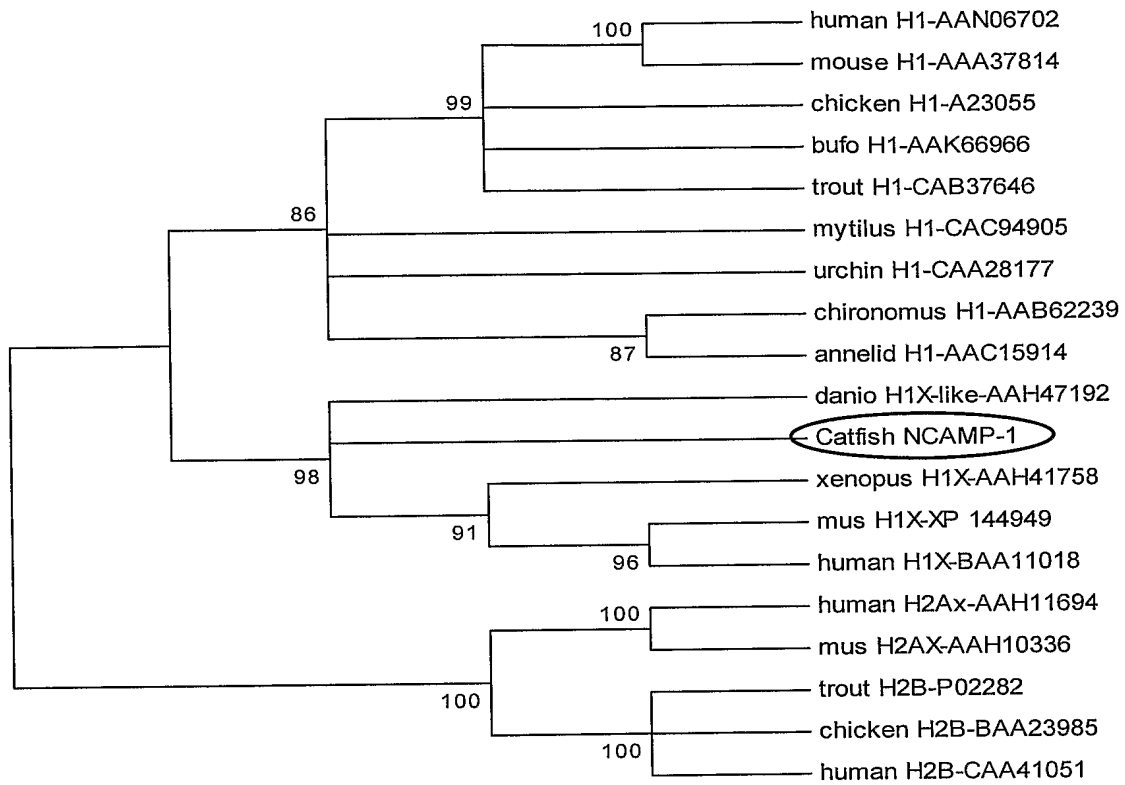
```

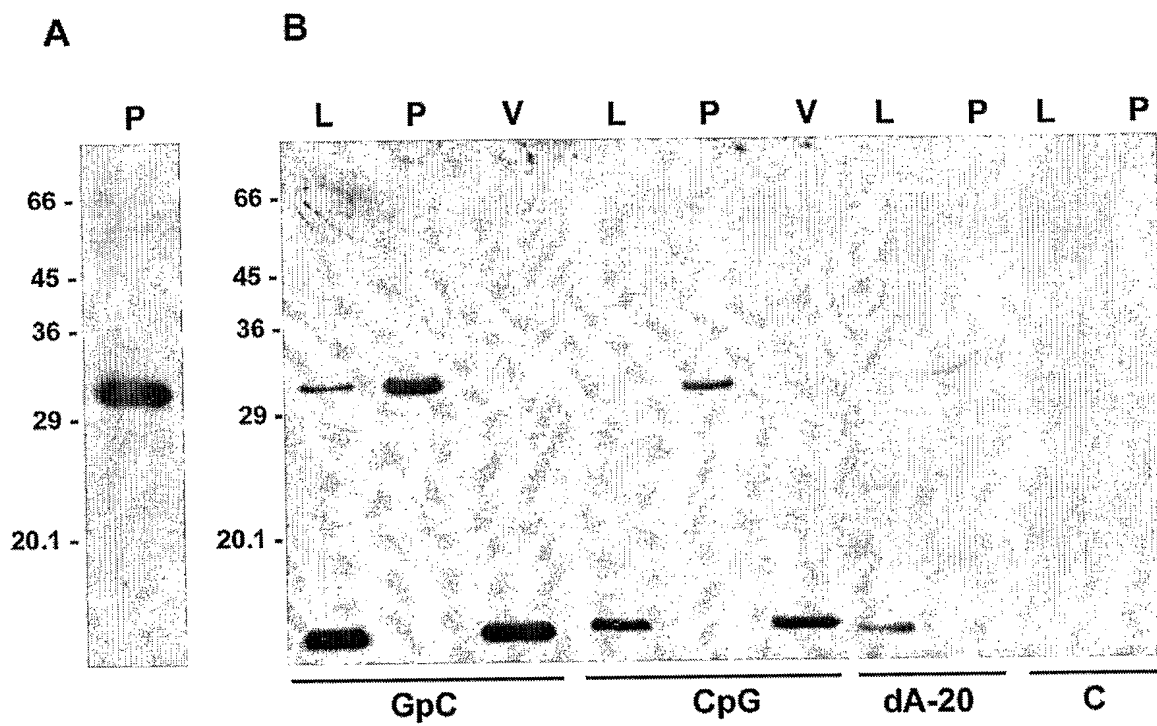
Catfish NCAMP-1      : MSQAQETAPAAAPVQPSQP-----AAKKGPASAKAPASAEKKNKKKKKGCKYSLVINALQTLGERNG : 68
Danio H1X-like-AAH47192 : -----MPAVVESAPAPAP-----AEKKAPAVASPAKK-----KKKSKGCKYSLVTDARTLGERNG : 59
Xenopus H1X-AAH41758 : -----MALELEENLHSTEEDEEEEEEGDEMRSTRNKGGAASSSGNKKKK--KKNQPCRYSLVVDTRKLGERNG : 73
Mus H1X XP_144949 : -----MSVELEEALPPTSDG-----TARKTAKAGGSAAPTQPKRRKN-PKKNQCKYSLVVTIRKLGERGG : 63
human H1X-BAA11018 : -----MSVELEEALPVTITAE-----MAKKVTKAGGSAALSPSKKKKNSKKKNQCKYSLVVTIRRLGERNG : 64

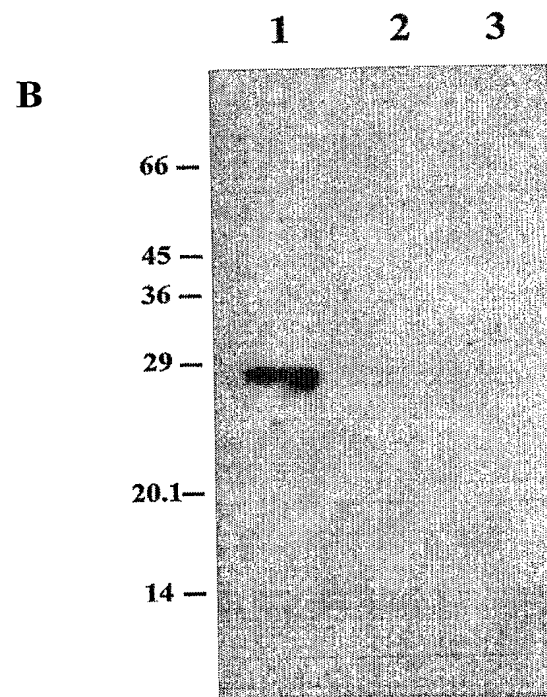
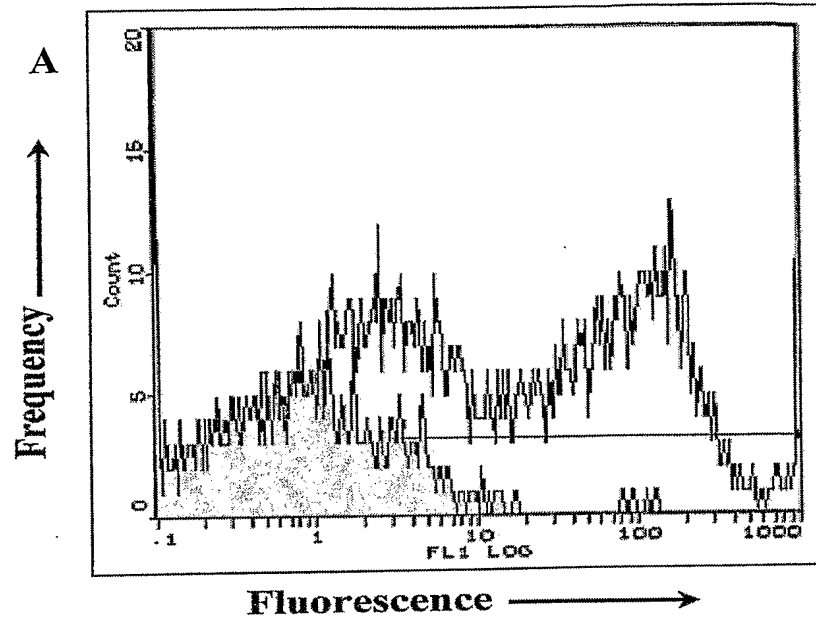
Catfish NCAMP-1      : SSLKTIYNEAKKVNWFDOQHGRVTLRYSTRALLQNDTLLQVKG-----GANGSFKLNKKKTFIPRTKKSVKPRKTAKPTKKPAK : 148
Danio H1X-like-AAH47192 : SSLKTIYNEAKKVSWFDOQNGRMILPASIRALVINDTLLQVKG-----GANGSFKLNKKKLEKKPKK-AASKKATKTEKPTSK : 138
Xenopus H1X-AAH41758 : SSLAKIYSEAKKVSWFDOQNGRTYLYKYSIKALVQNDTLLQVKG-----GANGSFRLNKKKLEGLPYDKKPPPAKPSSSSSNKK : 153
Mus H1X XP_144949 : SSLARIYAEARKVWFDOQNGRTYLYKYSIRALVQNDTLLQVKG-----GANGSEFLNKKKLEGGERR-GASAAASPAPKAR-- : 140
human H1X-BAA11018 : SSLAKIYTEAKKVEWFDOQNGRTYLYKYSIKALVQNDTLLQVKG-----GANGSFKLNKKKLEGGERRGAPAAATAPATAHKA : 144

Catfish NCAMP-1      : KAAK-----KKKRVSGVKKATPPPEKTSMPK-----KADKSPAVSARKASPKAKQTKTAKKT-- : 203
Danio H1X-like-AAH47192 : KAVT-----KKVSAKKSAKSPVKKKTTPKKT-----SVKKATAKPKKTASKKPPAAAKKTKTSR-- : 192
Xenopus H1X-AAH41758 : QQQ-----GPSSSPSKSHKKAKPKAAAEKKPKTSAAKAKSPKKSAAKG-KKKKKGAKPSVRAPKSKA : 217
Mus H1X XP_144949 : -----TAAADKTPAPQ-PERRAHKS-----KTAASAAASAKKVKKAAAPSVKVPKCKK- : 188
human H1X-BAA11018 : KKAAPGAAGSRRADKKPARGQKPEORSHKKGAGAKDKGKAKKTAAGGKKVKKAAAPSVKVPKCKK- : 213

```

Figure 12

Figures 13A - 13B

Figures 14A - 14B

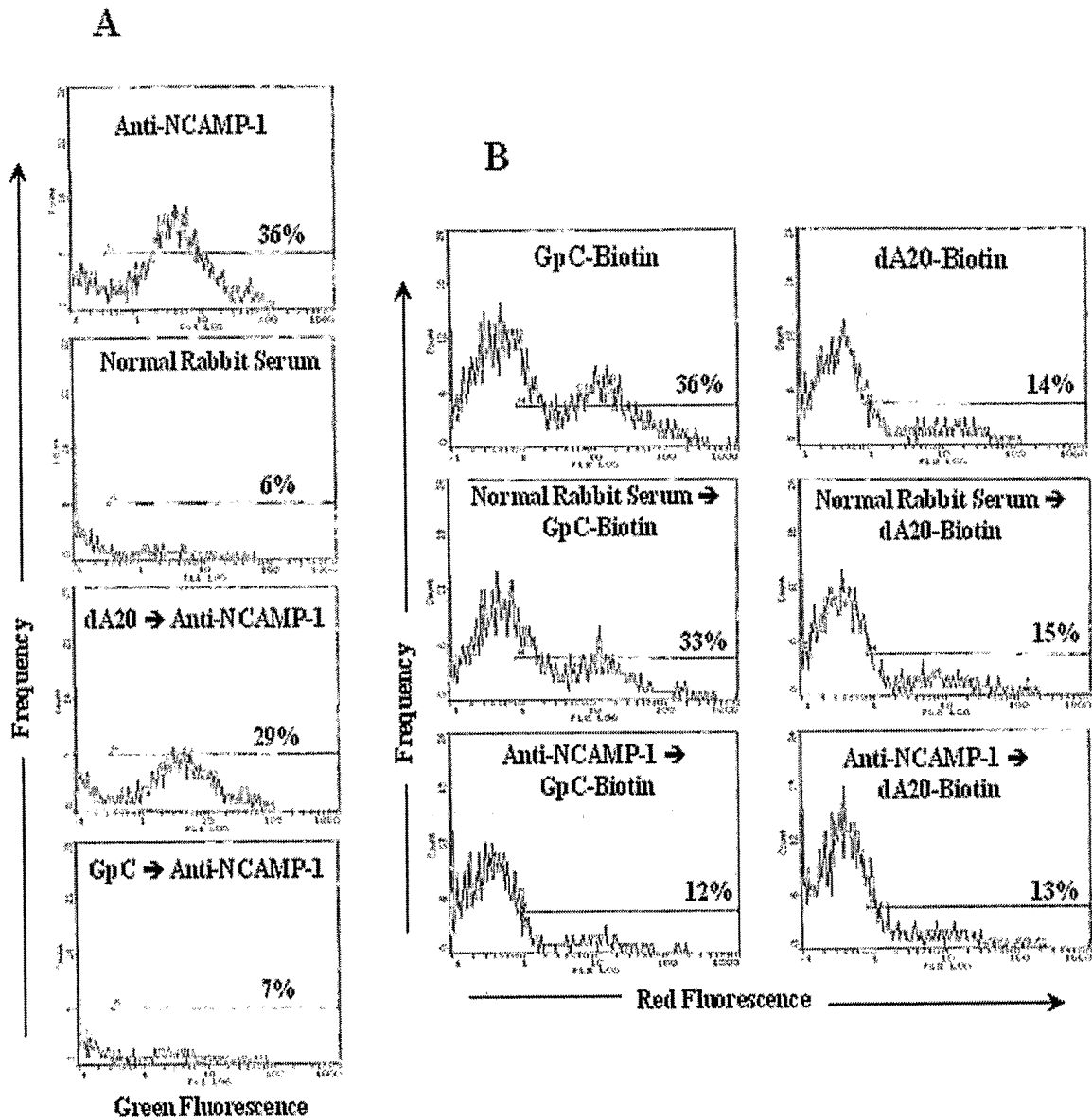
Figures 15A - 15B

FIGURE 16

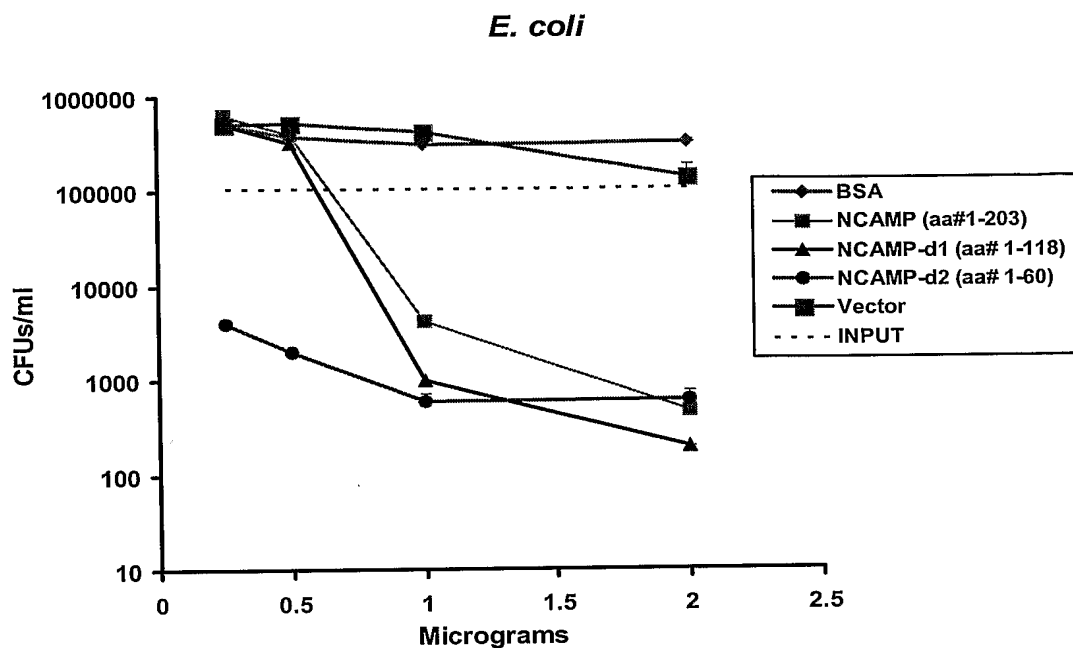
NCAMP-1 PEAAAPVQPSQPAAKKKGPASAKAPSAEKKNNKKAKGKGPG
 H1-Mus -----SETAPAEKPAPAKAE--
 H1-Human ---KLNKKAAASGEAKPKAKAKSPKKAKA--
 H1-Trout -KAVAAKKSPPKKAKKPAT--

C-Terminal residues :

NCAMP-1
 -TAKPTKKPAKKAACKKKRVSGVKKATPPPEKTSKPKKADKSPAVSAKKASKPKKAKQT
 H2A CF --KGRGKQGGKVRAKAKTRSS--
 H2B Trout -----PDPAKTAPKKGSKKAVTKXA--
 H2B Bass1 -----PEPAKSAPKKGSKKAVT-
 H2B Bass2 -----PDPAKTAPKKGSKKAVTKTAG
 H1-Trout -----AEVAPAPAAAAPAKAPKKKA
 H1-Trout ---AEVAPAPAAAAPAKAPKKKAAAKPKK-----

Figures 17A - 17B

A



B

